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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,480	01/21/2004	Richard H. Tsai	M4065.0878/P878-A	9802

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EXAMINER	
WHITMORE, STACY	

ART UNIT	PAPER NUMBER
2825	

MAIL DATE	DELIVERY MODE
06/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/760,480	TSAI, RICHARD H.	
	Examiner	Art Unit	
	Stacy A. Whitmore	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/21/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the image sensor including at least all subcomponents such as decoder section, pixel section and signal lines connecting the decoder section and pixel section must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. As for claims 18 and 21, applicant claims pixel and decoder sections (having features, What features?) as having first and second pitches. How does an entire section have a pitch? Does applicant intend to mean the pitch of the signal lines, for example, of the decoder section have a certain pitch? Clarify.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18-22, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayano (US Patent 5,195,053).

5. Hayano '053 was cited in the IDS dated 1/21/2004.

6. For purposes of the rejection utilizing Hayano, the preamble claim language of an image sensor in claim 18 and dependent claims is not given patentable weight, since nothing in the body of the claim is tied to an image sensor.

7. As for the claims, Hayano discloses the invention as claimed, including:

18. (original) An image sensor comprising:
a pixel section having a first pitch [fig. 6, elements 1 and spacing between (pitch)]; and

a decoder section having a second pitch, wherein the second pitch is smaller than the first pitch [fig. 6, elements 12, and spacing between signal lines (pitch)];

19. (original) The image sensor of claim 18, wherein the decoder section comprises a plurality of generic blocks stitched together in a series, wherein adjacent generic blocks are separated by a stitching section including routing lines operative to connect signal lines in the adjacent generic blocks [fig. 6, elements 12 are stitched together in series through routing lines];

20. (original) The image sensor of claim 18, further comprising a plurality of interconnect lines connected between the pixel section and the decoder section, wherein two or more of said interconnect lines are connected at an angle to accommodate the stitching sections [fig 6, connection between elements 12 of the routing lines exists between pixel sections (1) and at "an angle". The angle claimed does not specify any particular angle, so examiner interprets "an angle" to be the angle that the interconnect lines are connected in figure 6];

21. (original) A method comprising:

patterning a pixel section including pixel features having a first pitch on a surface [fig. 6, elements 1 and spacing between (pitch), the device of figure 6 has inherently been patterned]; and

patterning a decoder section including features having a second pitch which is smaller than the first pitch on the surface [fig. 6, elements 12, and spacing between signal lines (pitch), the device of figure 6 has been inherently patterned];

22. (original) The method of claim 21, wherein a ratio of the second pitch to the first pitch is less than approximately 0.98 [fig 6, pitch of elements 1 to elements 12 has a pitch that appears to be much less than 0.98];

24. (original) The method of claim 21, wherein a ratio of the second pitch to the first pitch is less than approximately 0.95 [fig 6, pitch of elements 1 to elements 12 has a pitch that appears to be much less than 0.95];

8. Claims 18, 21-22, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sauer (US Patent 5,336,879).

9. As for the claims Sauer discloses the invention as claimed, including:

18. (original) An image sensor comprising:
a pixel section having a first pitch [fig. 11, elements 920 and spacing between (pitch)]; and
a decoder section having a second pitch, wherein the second pitch is smaller than the first pitch [fig. 11, elements 926 and 928, and spacing between signal lines (pitch), elements 926 and 928 are col. and row decoder signal or address lines that have a pitch that is less than that of the element 920; col. 6, lines 20-58];
21. (original) A method comprising:
patterning a pixel section including pixel features having a first pitch on a surface [fig. 11, elements 920 and spacing between (pitch), the device of figure 11 has inherently been patterned]; and
patterning a decoder section including features having a second pitch which is smaller than the first pitch on the surface [fig. 11, elements 926 and 928, and spacing between signal lines (pitch), the device of figure 11 has been inherently patterned];
22. (original) The method of claim 21, wherein a ratio of the second pitch to the first pitch is less than approximately 0.98 [fig 11, pitch of elements 926 and 928 have a pitch that appears to be much less than 0.98];
24. (original) The method of claim 21, wherein a ratio of the second pitch to the first pitch is less than approximately 0.95 [fig 11, pitch of elements 926 and 928 have a pitch that appears to be much less than 0.95];

10. Claims 18, 21-22, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Cazaux (US Patent 5,777,672).

11. As for the claims, Cazaux discloses the invention as claimed, including:

18. (original) An image sensor comprising:

a pixel section having a first pitch [fig. 2, elements P1-P4, and pitches , example, p1 and p2]; and

a decoder section having a second pitch, wherein the second pitch is smaller than the first pitch [fig. 2, elements Pe1, Pe2 of elements RL1 and/or RL2 (register elements for decoding), and spacing (pitch) between elements Pe1 and Pe2];

21. (original) A method comprising:

patterning a pixel section including pixel features having a first pitch on a surface [fig. 2, elements P1-P4, and pitches , example, p1 and p2, the device of fig. 2 has been inherently patterned]; and

patterning a decoder section including features having a second pitch which is smaller than the first pitch on the surface [fig. 2, elements Pe1, Pe2 of elements RL1 and/or RL2 (register elements for decoding), and spacing (pitch) between elements Pe1 and Pe2 , the device of figure 2 has been inherently patterned];

22. (original) The method of claim 21, wherein a ratio of the second pitch to the first pitch is less than approximately 0.98 [fig 2, pitch of elements Pe1, and Pe2 of RL1 or RL2 have a pitch that appears to be much less than 0.98 of the of the pitch of elements P1-P4];

24. (original) The method of claim 21, wherein a ratio of the second pitch to the first pitch is less than approximately 0.95 [fig 2, pitch of elements Pe1, and Pe2 of RL1 or RL2 have a pitch that appears to be much less than 0.95 of the of the pitch of elements P1-P4].

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A. Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stacy A Whitmore/
Primary Examiner
Art Unit 2825

SAW
June 14, 2007